

# **PACKAGE ON UNIVERSAL SERVICE REFORM**

## **“UNIVERSAL SERVICE ENDPOINT REFORM PLAN” (USERP)**

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### **I. OVERVIEW**

This plan has two main components. The first addresses support for wireline Incumbent Local Exchange Carriers (“ILECs”), principally by increasing reliance on state commissions to achieve the goals set forth in section 254. The second component proposes a new method for allocating universal service funds to competitive Eligible Telecommunications Carriers (“ETCs”).

### **II. FUNDING FOR WIRELINE IN HIGH-COST AREAS**

#### **A. The State Allocation Mechanism**

USAC would still calculate support amounts to incumbent local exchange carriers and would continue to disburse funds to carriers; but the state commission in each state would determine allocations to carriers within that state. State commissions would have what amounts to a power of appointment (or allocation) over federal high-cost funds. States would also be responsible for ensuring that wireline carriers receive sufficient support so that the rates in all wirecenters do not exceed a benchmark amount. States would also determine the purposes to which funds are applied.

The plan anticipates that support to carriers would come from a mix of state and federal universal service funds. While this plan creates incentives for states to create their own universal service funds and raise rates to a federal benchmark, it does not require states to do so. States may face more pressure to increase explicit support in some areas where competition is making continued rate averaging impracticable.

This role for state commissions is consistent with the Act. The Act gave states significant responsibility to act as partners with the FCC in achieving national universal service goals. State commissions would retain all current jurisdiction (if any) over local exchange rates. For this reason, the plan assigns primary responsibility for universal service to the agency that has the most oversight over end-user rates, and states would be primarily responsible for rate differences within their boundaries.<sup>1</sup> Federal support (“Part I”) would be provided where average costs are so high that the state cannot attain comparable and affordable rates through its own efforts. A second form of federal support (“Part II”) would be provided where a state needs to make extraordinarily large efforts to equalize the differences within its own boundaries.

The following sections discuss how costs would be measured under the plan, how the FCC would allocate support totals to the states, and how the states would sub-allocate that support to carriers.

## **B. Costs**

The plan would be primarily cost-based, although costs would be adjusted for intercarrier revenues. To determine costs, the plan would look generally at “embedded” or accounting cost,<sup>2</sup> and would calculate what amounts to a revenue requirement for plant, depreciation, return and operations. This choice should maintain current incentives for continued network investment.<sup>3</sup>

Nevertheless, costs would be limited in ways that reduce incentives for wasteful spending. This could be done with the cost outputs of a “forward-looking”

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<sup>1</sup> Additional federal responsibility in this area is an option explained below.

<sup>2</sup> As noted below, for certain purposes, where existing records are not sufficient to allocate costs to areas smaller than study areas, overall costs could be allocated among wire centers using forward-looking cost models.

<sup>3</sup> While the plan would use embedded cost as the primary inputs for support calculations, the support mechanism described below would also work if the Commission were to use forward-looking costs.

costs model<sup>4</sup> or with “best in class” standards.<sup>5</sup> Limitations would be imposed in cost or investment areas where abuse is suspected and where imposing the cap would not unduly harm investment incentives.

The plan would look comprehensively at all categories of ILEC costs, including loop, ports, switching and transport.<sup>6</sup> Costs would also include all operations, including network operations, customer service operations, and corporate operations. Costs will be considered on an aggregate basis; and a low cost in one category will offset a high cost in another category.

This contrasts with current support programs. For rural carriers, current programs look only at specific cost components, such as switching<sup>7</sup> or loops, and they do not include any costs for tandem switching or interoffice transport.<sup>8</sup> For nonrural carriers, the Model Based Support Program includes loop costs, plus some local switching and local transport costs. It does not include the costs of all local and tandem switching nor all transport costs.<sup>9</sup>

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<sup>4</sup> For example, feeder and loop investment, and switching investment, could be limited to 125% of the output of a forward-looking model. Exceptions might be needed in areas where the model is not likely to take account of all cost factors, such as in permafrost areas or areas not served by the general road network.

<sup>5</sup> For example, corporate operations expenses are currently capped for the High Cost Loop Program based upon industry average costs. A revised cap of this sort might impose stricter limits based upon a class of low-overhead companies. Dr. Lee Selwyn suggested this approach at the Joint Board’s hearing on Universal Service on June 7, 2005.

<sup>6</sup> Incremental costs of vertical services would be excluded.

<sup>7</sup> Although local switching costs are supported by the Local Switching Support Program, that support is not determined on the aggregate level of those costs, but upon study area size, which does not always predict switching cost.

<sup>8</sup> Since this plan provides universal service support for high transport and tandem switching costs, it reduces the burdens on NECA pools and intercarrier compensation recovery. This may simplify the task for intercarrier compensation reformers.

<sup>9</sup> Some of these excluded costs are recovered through intercarrier compensation and, for some companies, the NECA pooling process.

The plan also provides support for costs in both jurisdictions using a unified approach. Therefore, it replaces not only programs now supporting intrastate costs, but also programs such as IAS and ICLS that support interstate costs.

## **C. Federal Support To States**

Federal support to each state might come in two forms, as described below.

### **1. Part I Support**

Federal “Part I” support is designed to continue the FCC’s policy of maintaining affordable and comparable rates among states. Support would be calculated based upon the aggregated cost characteristics of all incumbent carriers in the state and provided to states with high average costs. This would effectively assign states the principal responsibility for universal service support within their own borders.

This averaging policy is consistent with that used now for nonrural carriers (although it does not use a forward-looking cost model). It would be a change, however, for rural carriers, whose support is now separately calculated for “study areas” without any regard for costs elsewhere in the same state.

Section 254 speaks to “rates.” The plan would equate rates with the average unit revenue requirement that a carrier must recover from its customers (“Consumer Cost”). The plan assumes this is equal to the difference between the carrier’s total cost and its inter-carrier revenues.<sup>10</sup> To manage customer rates, federal support therefore would manage the carrier’s “Consumer Cost.”<sup>11</sup>

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<sup>10</sup> Billing and collection revenues would be treated as intercarrier revenues.

<sup>11</sup> The equation expressing this is:

$$\text{Consumer Cost} = \text{Gross Cost} - \text{Net Intercarrier Revenue} - \text{Universal Service.}$$

Gross Cost would be determined as described in the preceding section, and might exclude some plant or expenses associated with unregulated services.

The plan would set a benchmark standard to ensure that Consumer Cost is affordable and reasonably comparable. A “permanent benchmark” would be set at 125 percent of the national average urban cost (net of intercarrier revenue).<sup>12</sup> Support to each state would be sufficient to keep this cost at or below the benchmark everywhere in that state.<sup>13</sup> This provides a functional definition of “affordable” and “reasonably comparable” rates. The effect would be that, after federal support has been received, average Consumer Cost would be, in every state, no higher than the benchmark.<sup>14</sup>

Except during a transitional period, the plan does not provide more support than is necessary to achieve affordability and comparability. Specifically, no state should have so much federal support that it could set some rates (which reflect Consumer Cost) below the benchmark and still have enough federal support to keep other rates from rising above the benchmark.<sup>15</sup>

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<sup>12</sup> This benchmark is significantly lower than that rejected by the Tenth Circuit in *Qwest II*. In that case the court rejected a *rate*-based standard of 138% of the national urban *rate*. However, the FCC had used a *cost*-based benchmark of two standard deviations to actually distribute support. Neither the court nor the FCC made findings about how this cost benchmark related, as a percentage, to either national average cost or to urban average cost. The court did find, however, that the FCC had not demonstrated that there was any record support for its “pairing of rates to costs.”

As noted in the main text, the plan sets a standard of 125% of urban average cost, net of intercarrier revenue. In the third quarter of 2005, USAC is using a cost-based benchmark (\$28.13) equal to 131% of the national average cost (\$21.43). For two reasons these percentages cannot be directly compared:

- 1) The 131% is a multiple of *average* cost, but the 125% is a multiple of *urban* cost. The FCC has never made any finding about urban average cost, so it is not possible to convert the one standard to the other without additional findings.
- 2) The existing mechanisms are not adjusted for inter-carrier revenues.

<sup>13</sup> Support would be equal to the following, with all terms defined on a per-line, per-month basis:

*Federal Support to State = State Average Cost – Net Intercarrier Revenue – Permanent Benchmark*

<sup>14</sup> As discussed in the following sections, internal cost variations within a state would be a matter primarily of concern to that state.

<sup>15</sup> As discussed below, any state with low rates and costs in some areas might need to have a state universal service fund under subsection 254(f) to avoid violating section 254.

## **2. Part II Support**

The second support program recognizes that state USF charges are themselves a part of “rates,” and that state USF programs can impose significant burdens on urban ratepayers, in violation of the principles of section 254. Part II support would be provided to states in which an explicit high-cost fund would impose an undue internal burden on state ratepayers, but only to states that actually have explicit USF programs.

Because states with substantial rural areas would have the greatest burden of support, Part II support would be available in those states with the highest proportions of high-cost customers. Part II support would be calculated without any direct reference to the state’s average cost, and would be available without regard to whether the state also received Part I support. Any Part I support, however, would offset Part II support.

To calculate the internal burden imposed by a state USF program, Part II support would make standardized assumptions about state USF effort. It would assume that the state has been divided into three zones, corresponding to the UNE zones existing in most states. These zones are customarily called “urban,” “suburban,” and “rural.”<sup>16</sup> The plan also assumes that the state provides support to customers in each zone based on the average cost in that zone and using a uniform benchmark that is equal to the benchmark used for Part I support. Imputed state support to each zone is then calculated and summed. The required contribution level of state telecommunications customers is then calculated. If that required

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<sup>16</sup> By aligning the boundaries of UNE zones with USF calculations, opportunities for arbitrage can be eliminated.

contribution level exceeds \$2.00 per month,<sup>17</sup> then Part II support would make up any difference not already covered by Part I support.<sup>18</sup>

### **3. Hold Harmless and Separations**

Transition to the new plan would be gradual through use of a declining hold-harmless mechanism. In the first year, hold-harmless support would equal the support received by the state in the previous year. Each year thereafter, hold-harmless support to the state would decrease by \$1.00 per month per switched line until the hold-harmless provision no longer had any effect. This provision allows the state commission to transfer federal support gradually to more needy areas and to implement state USF funds (where necessary), but without creating a risk of rate shock.

The plan is “omni-jurisdictional” because it does not rely on traditional separated costs. First, the new program would replace all existing universal service programs, regardless of the nature of the costs they currently support. Specifically, the plan would replace High Cost Loop Support, Local Switching Support, Safety Net Support, High Cost Model Support, Interstate Access Support, and Interstate Common Line Support. Second, the support calculation would consider costs on a total or “unseparated” basis.<sup>19</sup> Third, the plan is indifferent to the jurisdiction of revenue. For intercarrier revenue in particular, the plan is not concerned about whether that revenue is derived from intrastate or interstate traffic.<sup>20</sup>

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<sup>17</sup> Wireline and wireless lines would both be counted. This calculation does not presume that the state would actually collect revenue on a per-line basis.

<sup>18</sup> An illustrative calculation of Part II support is attached in spreadsheet form.

<sup>19</sup> This is true today for the High Cost Loop and High Cost Model Support programs.

<sup>20</sup> Separations would formally continue, but as is true today with “Average Schedule” companies, jurisdictional separations would be determined by the jurisdictional nature of revenues. For example, if 30% of revenues are interstate, a total company separations methodology would assign 30% of costs to interstate.

## **D. State Allocations of Support**

States would have first-line responsibility to ensure that all customers have rates that are affordable and comparable. In many cases, federal support and retail rate averaging would be sufficient to achieve this goal. In other cases, explicit state universal service programs would be needed. The following four cases illustrate how state and federal funds would interact.<sup>21</sup>

- Case 1: Uniform low cost. This state would not receive any Part I or Part II federal support. Since Consumer Cost is already below the benchmark, universal service objectives can be achieved without any federal or state USF programs.
- Case 2: Uniform high cost. The plan would provide Part I support so that, if it is well distributed to all carriers, each carrier would have an average Consumer Cost below the benchmark and each customer would have a rate that is affordable and comparable.
- Case 3: High but varying cost everywhere. This case is more probable. Federal Part I support would still come to the state, since its average cost is high. Compared to Case 2, however, the allocation task for the state commission is more complex, and different carriers will be allocated different amounts of federal support. The end result, however, is the same as Case 2: each carrier would have an average Consumer Cost below the benchmark and each customer would have a rate that is affordable and comparable.
- Case 4: Some high cost, some low cost. This is the most probable case. Because some customers have low cost, Part I support would not be sufficient to produce everywhere a Consumer Cost below the benchmark. Instead, the state would need to establish a state universal service fund under section 254(f).<sup>22</sup> That state program would impose a charge in all areas, including low-cost areas. The charge would raise effective rates everywhere, but the support it produces would reduce costs in high-cost areas. If the imputed state USF charge rises above \$2.00 per month, Part II support would also be provided to the state.<sup>23</sup>

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<sup>21</sup> In the examples, “low cost” means a Consumer Cost below the benchmark, and “high cost” means a Consumer Cost above the benchmark.

<sup>22</sup> We discuss below an optional mechanism to use when the state fails to take this action.

<sup>23</sup> Where a state cannot implement a state universal service program (such as because of a lack of state law authority), the FCC may have to substitute for the state and operate this portion of the program directly.

In all four cases the final results should be the same: average Consumer Cost for each carrier would be below the benchmark, and each customer would have an opportunity for a rate that is affordable and comparable.

State distribution decisions would be subject to some limitations. First, distributions should be sufficient to ensure that rates can be just, affordable and – because they are no higher than the permanent benchmark – reasonably comparable to urban areas nationwide. Second, support to an ILEC would not depend on whether the ILEC is classified as a “rural telephone company.” Third, distributions should be predictable and should be based on published data and explicit and predetermined calculations.

Fourth, state distributions to carriers would be constrained by declining hold-harmless protection. Each year, hold-harmless support to any carrier might decrease by \$1.00 per month per switched line. This would allow the state commission to transfer federal support gradually to more needy areas and to implement state USF funds (where necessary) while minimizing rate shock.

Except for these four limitations, state allocations would be discretionary. States could assign support to particular carriers, study areas or exchanges. They could also condition support funds on particular uses, such as requiring the carrier to meet broadband deployment targets in particular exchanges. Each state would annually notify USAC and the FCC of its allocation plan.

State commissions would be required to file annual reports with the FCC, concurrent with the annual ETC certifications now filed in September. The reports would allocate support for the upcoming year to ETCs. The reports would also include:

- A section 254 compliance report, including the results of rate comparability surveys, conducted according to a prescribed method, and including an evaluation of the success of state and federal programs in achieving affordable and reasonably comparable local exchange rates.

- An accountability summary explaining how federal funds have been and are likely to be used by carriers to promote universal service, including the results of any company audits or “agreed-upon procedure” reviews that the state requires from ETCs.
- A broadband report describing the state’s broadband deployment goals and summarizing progress toward those goals.

Any carrier or customer may petition the FCC to review whether a state’s support allocation decisions have been sufficient to produce affordable and comparable rates.

## **E. Rural and Nonrural**

The plan would apply to all companies, rural and nonrural.<sup>24</sup> This would be an effective means to address issues raised in *Qwest II* and would eliminate the present pattern that rates and support can depend on the type of carrier that owns an exchange, rather than on whether that exchange is rural or high-cost. This would also eliminate the so-called “parent trap” problem under which support levels are controlled by the history of which exchanges were controlled at particular times by which kinds of carriers.

The plan could conceivably be applied solely to rural companies.<sup>25</sup> That choice, however, has disadvantages. Most important, it would treat rural areas differently based upon the identity of the carrier that serves it. This choice would also leave unresolved the sufficiency of federal support to non-rural carriers, a matter that must be addressed following *Qwest II*.

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<sup>24</sup> This choice might exceed the scope of the current referral to the Joint Board.

<sup>25</sup> This would leave in place some existing universal service programs that apply to nonrural carriers, including the High Cost Model Program and Interstate Access Support.

## **F. Non-Participating States and the Federal Overlay**

Some states have low average Consumer Costs, but also have some very high-cost areas. Implicit intra-company transfers are currently large enough in most of these states to prevent unaffordable or non-comparable rates. Some low or moderate cost states, though, will need to adopt supplemental state universal service programs. The act does not require that any state adopt a subsection 254(f) programs, and the FCC probably cannot mandate such state programs under existing law, even if the Joint Board and the FCC think they would be useful. As a result, some states might not do enough, in the judgment of the Joint Board, to meet their responsibilities under section 254. The Act does not clearly provide a judicial remedy to individual customers in this circumstance. The FCC may have to provide a remedy since it is the FCC that has ultimate responsibility for compliance with section 254.

One option would be for the FCC to operate what amounts to a state-specific universal service program in those states that do not establish a state program on their own. This would require the FCC to establish a supplemental universal service charge that applies only in one state. Revenues from this supplemental charge, together with any support otherwise due to the state, would then be allocated directly by the FCC to carriers. In these cases, the state would not exercise its normal role in establishing state programs and in allocating federal support.

In states with such a federal overlay, all customers would pay a higher total federal USF charge higher than is paid by customers in other states. However, because the additional proceeds would defray costs in high-cost areas, the net effect should be that all customers in the state have affordable and comparable rates.

### **III. COMPETITIVE ETCs**

The plan would restructure support to Competitive ETCs, making the most significant changes with regard to wireless CETCs.

The current universal service fund provides portable support to CETCs based on ILEC support. It also increases per-line support to ILECs as they lose customers. This can have the overall effect of financing competitive CETC networks with universal service.<sup>26</sup> The plan does not fully address that problem, which is rooted in the portability rules. Although the suggestions below should slow the growth of the fund's CETC payments, more fundamental policy changes would be needed to fully insure the universal service fund against growth of this kind.

#### **A. Wireless CETCs**

Wireless CETCs would no longer be funded by "portable" universal service support that is based on the costs of incumbent wireline carriers. This policy change reflects the fundamental cost, regulatory and rate differences between wireless and wireline service. There are also functional differences that limit substitution of one service for the other.

Wireless and wireline networks have different cost characteristics. First, the geographic scales are different. For wireline networks, costs are largely determined at the wireline exchange or "wire center" level, and those costs control USF support. By contrast, wireless costs are primarily incurred over areas served by antenna towers, which can be larger or smaller than wire centers. Second, building density

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<sup>26</sup> For example, consider a rural ILEC whose territory has been overbuilt by a neighboring CLEC. As the competitor gains lines, the rural ILEC's overall support would not ordinarily decrease, because its loop and switching costs would not decrease. Rather, the ILEC's total support would remain relatively constant despite a shrinking customer base, and its per-customer support would increase. Under the portability rule, this would increase per-line support for the CLEC. In the simplified case where the carriers equally divide the market and each has the same per-line cost, the net effect could be that universal service support would not change for the ILEC but would pay all or nearly all the cost of constructing the CLEC's overbuild. If the CLEC should obtain more than a 50% market share, universal service could pay more than the total cost of the CLEC's network.

is the most significant cost driver for wireline networks. Wireless networks also serve travelers, particularly along highways, allowing for cost recovery from customers who live elsewhere. Third, wireless services are not subject to the same regulatory requirements as wireline companies. Equal access, service quality standards, tariffing, and regulatory reporting requirements all add cost to wireline operations. Providing support to wireless carriers based on wireline costs creates opportunities for financial windfalls.

Wireless rates also operate at a different geographic scale. For most wireless carriers, rates do not vary locally or even across state lines. Further, wireless rates and rate structures differ from traditional wireline. As a result, using common benchmarks for both wireline and wireless services may not accomplish the goals of universal service. While universal service support to wireless carriers may create incentives for these carriers to expand their coverage to unserved areas, that support is unlikely to have an effect on the affordability or comparability of wireless rates.

Wireless services can perform functions not possible for wireline service. Nevertheless, most customers do not yet consider wireless to be a full substitute. Although the substitution rate is increasing, most customers still consider wireless to be a different service that supplements their landline service. The effect of providing universal service to wireless under these circumstances therefore is to support construction of a second, parallel network.

Under the plan, wireless CETCs would instead be funded through a separate “Portability Fund” that would be available only to wireless carriers. The goal of the fund would be to substantially improve wireless coverage in unserved areas, with a particular emphasis on unserved areas with major roads.<sup>27</sup>

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<sup>27</sup> Roads through designated wilderness areas might be excluded from eligibility.

The Portability Fund would be capped at \$1 billion per year. This is more than the projected \$800 million CETC support projected for 2005, but substantially less than the approximately \$1.8 billion that the wireless industry contributes to USF.

The Portability Fund would extend for five years and would then sunset. As the sunset date approaches, the Joint Board would review the program and assess whether the Portability Fund should be extended for an additional term.

As with wireline support, the first step in administering the Portability Fund would be to allocate money to the states. Federal allocations would be made based on a combination of factors including the size of unserved low-density areas, public safety needs and the probable call volumes from incrementally serving new areas.

State commissions would then sub-allocate their funds to CMRS carriers using a competitive grant method. State commissions would request proposals from CMRS carriers to provide additional coverage in unserved areas and unserved roads.<sup>28</sup> The state commission would then award federal grants for construction of additional facilities. The grantee would be required to show thereafter that all funds had actually been properly expended.

## **B. Other Competitive ETCs**

The plan would continue the present portability policy for wireline CETCs of basing support on ILEC costs, but the scale of measurement would change. Under the plan, each incumbent's costs would be disaggregated below the wire center level. Each rural wire center would have two or more disaggregation zones, at least one devoted to the city, village or town center. In rural areas, a "rural doughnut" surrounding this core would also be defined; and it ordinarily would have higher

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<sup>28</sup> If it appears that relatively few areas and roads are unserved, the commission could identify areas with service from only one CMRS carrier and use the funds to establish a second provider's signal.

costs and be entitled to higher support.<sup>29</sup> To simplify the support calculation, several rural “doughnut” zones could be aggregated into a single rural class.

The plan would also require some changes to UNE pricing. UNE prices would be deaveraged using the same disaggregation zones that are used for determining support to CETCS.

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<sup>29</sup> By the time this plan can be implemented, one or more states may have already filed disaggregation plans based upon sub-wire-center disaggregation. In those states, no new disaggregation plan would be needed.